

# Notice of Allowability

Application No.

09/942,934

Examiner

Louis J. Casaregola

Applicant(s)

BOECK

Art Unit

3746

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 6/22/04.
2. ☒ The allowed claim(s) is/are 1-14.
3. ☐ The drawings filed on \_\_\_\_\_ are accepted by the Examiner.
4. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☒ All    b) ☐ Some\*    c) ☐ None    of the:
    1. ☒ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.  
**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
  6. ☒ CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.
    - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached
      - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
    - (b) ☒ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date 2/18/04.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

## Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date \_\_\_\_\_
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413), Paper No./Mail Date \_\_\_\_\_
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other \_\_\_\_\_


### ***Reasons For Allowance***

The present invention is a cooling system for a gas turbine engine. As claimed, this system comprises a cooling air chamber for supplying cooling air to a turbine casing, a cooling air tube having an inlet in an air bypass duct and an outlet connected to the cooling air chamber, and a movable deflector in the bypass duct upstream of the air tube inlet for deflecting air from the inlet. These components are all known in the prior art, but none of the references of record disclose or fairly suggest the claimed combination.

The most pertinent cited references include Redinger et al, Schaut et al, and Mills et al. Redinger discloses cooling air tube 30 having inlet 32 in a bypass duct and an outlet connected to casing cooling air manifold 34, but Redinger's system neither includes nor requires a movable deflector upstream of the tube inlet. Schaut discloses air tube 96 having an inlet with movable deflector 86 in a bypass duct (Fig. 5), but the extracted airflow is merely dumped into the atmosphere and not supplied to a cooling chamber. Mills discloses a further air tube 35 with movable flap (deflector) 38, but in this case, the tube inlet opens outside the engine rather than in a bypass duct, and the deflector is totally within rather than upstream of the tube. None of Redinger, Schaut, and Mills disclose the claimed combination, and there is no logical or obvious reason to modify any of the systems disclosed by these references. The claimed invention is therefore considered patentable over the prior art of record.

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L. J. Casaregola  
703-308-1027 (M-F; 7:30-4:00)  
703-872-9306 FAX  
June 30, 2004

  
**LOUIS J. CASAREGOLA**  
**PRIMARY EXAMINER**

If repeated attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Justine Yu, can be reached at 703-308-2675.

Information regarding the status of this application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR, and status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).